

## ABSTRACT

A method and an apparatus for analyzing performance of a multi-stage radio frequency amplifier are described. The method simplifies the multi-stage radio frequency amplifier into equivalent input parts, output parts  
5 and mid-stage parts. The mid-stage parts are temporarily unset. Therefore, the equivalent input parts and output parts will be adjusted to make best gain performance and the mid-stage parts will be the next targets for analysis. Repeating the above-mentioned methods for decomposing the circuit can systemize the method for analyzing circuits and problems in each part of the  
10 circuit may be found more quickly.